

Appl. No.: 10/677,981
Reply to Office Action of: 04/08/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claim(s) 1, 3-4 and 13-17 without prejudice.

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Previously presented) An acoustic structure capable of hands-free speaker function and protected against dust and water comprising, in a device body, two interconnected, separate cavities for a speaker and an isolator, where an isolating diaphragm, belonging to the isolator, is arranged to simultaneously function as an isolator for dust and water and as a sound-reproduction element, wherein on top of the isolating diaphragm on a shoulder in a second sub-cavity there is additionally placed a substantially circular attachment disc which has an aperture in it to direct a sound wave produced by the speaker and conducted via a first acoustic path into the second sub-cavity and there in a first sub-cavity, towards the isolating diaphragm.
6. (Original) The acoustic structure according to claim 5 wherein at least the perimeter area of that surface of the isolating diaphragm which faces the attachment disc is treated

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with glue in order to attach the isolating diaphragm to the attachment disc in a waterproof manner.

7. (Original) The acoustic structure according to claim 6 wherein at least the perimeter area of the other surface of the isolating diaphragm is also treated with glue in order to attach the isolating diaphragm to the shoulder in a waterproof manner.

8. (Original) The acoustic structure according to claim 5 wherein on that side of said attachment disc, which is not facing the isolating diaphragm, an audio channel is provided the width of which substantially at least equals the diameter of the aperture in the attachment disc, and which audio channel extends at least to said aperture.

9. (Original) The acoustic structure according to claim 8 wherein the attachment disc further comprises a lug arranged so as to be inserted in an alignment hollow in the second cavity in order to make the audio channel substantially parallel to the first acoustic path.

10. (Original) The acoustic structure according to claim 8 wherein the side of said attachment disc facing the isolating diaphragm is made concave to enable the isolating diaphragm to move in both directions about its rest position, and which movement is arranged so as to occur in accordance with the variations of acoustic pressure coming from the speaker means into the first sub-cavity.

11. (Original) The acoustic structure according to claim 10 wherein the movement of the isolating diaphragm is arranged so

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as to cause variation of acoustic pressure in the second sub-cavity from where said variations of acoustic pressure are arranged to be conducted outside the device via the second acoustic path.

12. (Original) The acoustic structure according to claim 9 which further comprises a sealing part against the device body and attachment disc, and a cover part against said sealing part, which are arranged so as to press the isolating diaphragm, supported on the attachment disc, against the shoulder in order to close up the second cavity in a dustproof and waterproof manner.

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)